AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Presently amended) A device for monitoring a cleaning process of a milk tank, the device comprising:

a monitoring unit comprising an input device for inputting into the monitoring unit a selected number of stages for the cleaning process of the milk tank;

a computer and a memory for at least temporarily storing data;

a first meter for measuring a temperature of a fluid present in the milk tank and for supplying to the monitoring unit a temperature signal indicative of the measured temperature; ~~and~~

a second meter for measuring an electrical parameter of the fluid present in the milk tank and for supplying to the monitoring unit a parameter signal that is indicative of the measured electrical parameter; and

a cleaning system controlled by the computer to perform the selected stages.

2. (Cancelled)

3. (Presently amended) The device as claimed in claim ~~2~~1, wherein the memory contains per stage a lower threshold or an upper threshold for the temperature or the electrical parameter or a duration of a stage.

4. (Original) The device as claimed in claim 1, wherein the monitoring unit further comprises an input device for inputting into the computer data indicating the type of fluid present in the milk tank.

5. (Presently amended) The device as claimed in claim 3, wherein the monitoring unit further comprises a comparing device for comparing the measured temperature or the measured electrical parameter or ~~the~~ a measured time with the relevant threshold.

6. (Original) The device as claimed in claim 5, wherein the comparing device auto-selects one of the thresholds with which the measured temperature or the measured electrical parameter or the measured time is compared.

7. (Original) The device as claimed in claim 6, wherein the comparing device auto-selects a new threshold when the measured electrical parameter has been below a predetermined switch value during a predetermined minimum switch time.

8. (Original) The device as claimed in claim 5, wherein the comparing device auto-selects a new threshold on the basis of the measured electrical parameter and the measured temperature.

9. (Original) The device as claimed in claim 1, wherein the milk tank comprises a stirring element for stirring a liquid present in the milk tank, the device further comprising a functioning sensor for measuring the functioning of the stirring element and for supplying to the monitoring unit a functioning signal that is indicative of the functioning of the stirring element.

10. (Original) The device as claimed in claim 1, wherein the milk tank is provided with a supply line for milk and cleaning fluid, the supply line being provided with a valve, the device further comprising a valve position detector for detecting a valve position of the valve and for supplying to the monitoring unit a valve position signal that is indicative of the valve position of the valve.

11. (Presently amended) The device as claimed in claim 10, wherein the supply line is provided with a three-way valve connected to a discharge line to a sewer ~~or the like~~, the valve being located between the three-way valve and the milk tank, the device further comprising a three-way valve position detector for detecting the valve position of the three-way valve and for supplying to the monitoring unit a three-way valve position signal that is indicative of the valve position of the three-way valve.

12. (Original) The device as claimed in claim 11, wherein the device further comprises a third meter for measuring temperature of a fluid present in the discharge line, and for supplying to the monitoring unit a further temperature signal that is indicative of the temperature of the fluid present in the discharge line.

13. (Original) The device as claimed in claim 12, wherein the memory contains a lower threshold or an upper threshold for the temperature of a fluid in the discharge line.

14. (Original) The device as claimed in claim 10, wherein the device further comprises a meter for measuring an optical parameter of milk or cleaning fluid present in the supply line.

15. (Original) The device as claimed in claim 1, wherein the device further comprises a color meter for measuring the color or the intensity of a color band of a fluid present in the milk tank.

16. (Original) The device as claimed in claim 5, wherein the device further comprises an alarm device operable by the comparing device.

17. (Original) The device as claimed in claim 1, wherein the second meter is a conductivity meter for measuring conductivity of the fluid present in the milk tank.

18. (Original) The device as claimed in claim 5, wherein the second meter is a conductivity meter for measuring conductivity of the fluid present in the milk tank.

19. (Original) An assembly of a milking robot comprising an automatic starting-up unit and a device as claimed in claim 16, wherein the alarm device is connected to the automatic starting-up unit for preventing automatic starting up of the milking robot with the aid of data from the comparing device.

20. (Original) The assembly as claimed in claim 19, wherein the second meter is a conductivity meter for measuring the conductivity of the fluid present in the milk tank.

21. (New) A method of monitoring a cleaning process of a milk tank, using a monitoring unit comprising an input device, a computer and a memory for at least temporarily storing data, a first meter and a second meter, the method comprising:
inputting into the monitoring unit a number of stages for the cleaning process of the milk tank;

measuring, using a first meter, a temperature of a fluid present in the milk tank and supplying to the monitoring unit a temperature signal indicative of the measured temperature; and

measuring, using a second meter, an electrical parameter of the fluid present in the milk tank and supplying to the monitoring unit a parameter signal that is indicative of the measured electrical parameter; and

controlling the cleaning process to perform the selected stages.

22 (New) The method as claimed in claim 21, wherein the memory contains per stage a lower threshold or an upper threshold for the temperature or the electrical parameter or a duration of a stage.

23. (New) The method as claimed in claim 21, further comprising inputting into the computer, data indicating the type of fluid present in the milk tank.

24. (New) The method as claimed in claim 22, wherein the monitoring unit further comprises a comparing device and the method comprises comparing the measured temperature or the measured electrical parameter or a measured time with the relevant threshold.

25. (New) The method as claimed in claim 24, further comprising auto-selecting one of the thresholds with which the measured temperature or the measured electrical parameter or the measured time is compared.

26. (New) The method as claimed in claim 25, further comprising auto-selecting a new threshold when the measured electrical parameter has been below a predetermined switch value during a predetermined minimum switch time.

27. (New) The method as claimed in claim 24, further comprising auto-selecting a new threshold on the basis of the measured electrical parameter and the measured temperature.

28. (New) The method as claimed in claim 21, wherein the milk tank comprises a stirring element for stirring a liquid present in the milk tank, the method further comprising measuring the functioning of the stirring element and

supplying to the monitoring unit a functioning signal that is indicative of the functioning of the stirring element.

29. (New) The method as claimed in claim 21, wherein the milk tank is provided with a supply line for milk and cleaning fluid, the supply line being provided with a valve, the method further comprising detecting a valve position of the valve and supplying to the monitoring unit a valve position signal that is indicative of the valve position of the valve.

30. (New) The method as claimed in claim 29, wherein the supply line is provided with a three-way valve connected to a discharge line, the valve being located between the three-way valve and the milk tank, the method further comprising detecting the valve position of the three-way valve and supplying to the monitoring unit a three-way valve position signal that is indicative of the valve position of the three-way valve.

31. (New) The method as claimed in claim 30, wherein the method further comprises measuring temperature of a fluid present in the discharge line and supplying to the monitoring unit a further temperature signal that is indicative of the temperature of the fluid present in the discharge line.

32. (New) The method as claimed in claim 31, wherein the memory contains a lower threshold or an upper threshold for the temperature of a fluid in the discharge line.

33. (New) The method as claimed in claim 29, wherein the method further comprises measuring an optical parameter of milk or cleaning fluid present in the supply line.

34. (New) The method as claimed in claim 21, wherein the method further comprises measuring the color or the intensity of a color band of a fluid present in the milk tank.

35. (New) The method as claimed in claim 24, wherein the method further comprises operating an alarm device in response to the comparing device.

36. (New) The method as claimed in claim 21, wherein the second meter is a conductivity meter and the method comprises measuring conductivity of the fluid present in the milk tank.

37. (New) The method as claimed in claim 24, wherein the second meter is a conductivity meter and the method comprises measuring conductivity of the fluid present in the milk tank.

38. (New) The method as claimed in claim 35, wherein the milk tank and monitoring unit form part of a milking robot comprising an automatic starting-up unit, wherein the alarm device is connected to the automatic starting-up unit, and wherein the method further comprises preventing automatic starting up of the milking robot with the aid of data from the comparing device.

39. (New) The method as claimed in claim 38, wherein the second meter is a conductivity meter and the method comprises measuring the conductivity of the fluid present in the milk tank